



Product Data Sheet

Spheerol EPL Range

Bearing grease

Description

Castrol Spheerol™ EPL is a range of greases which comprises lithium based products, containing highly refined mineral oils, fortified with extreme pressure (EP) additives as well as corrosion and oxidation inhibitors. These greases have been formulated with additives that provide good film strength under medium to high loads.

Application

The Spheerol EPL range comprises general purpose greases designed for plant wide lubrication. The range extends from a NLGI 3 for general purpose bearing lubrication to a NLGI 00 (see separate data sheet) semi-fluid grease suitable for centralised lubrication systems and grease filled gearboxes. These greases provide good protection against rust and corrosion as well as resistance to water wash-out; which makes them particularly suitable for equipment where moist or wet conditions are common.

The stiffer consistency afforded by an NLGI 3 grade makes this product particularly suitable for the lubrication of bearings that are vertically mounted, or components exposed to a high degree of vibration. The good levels of resistance to both corrosion and water wash-out, which makes this product suitable for equipment where moist or wet conditions are common.

The operating temperature range for this grease lies between - 25 °C and + 120 °C for Spheerol EPL 0,1 &2 and between - 20 °C and + 120 °C for Spheerol EPL 3.

Advantages

- High mechanical stability – the grease keeps its consistency in service ensuring long lubricant life
- Good adhesion – continuous lubrication and reduced consumption as film stays between lubricated surfaces
- Good water resistance – the grease film remains on the surface even in the presence of water
- Resistant to copper and steel corrosion – helps prevent rust and oxidation on metal surfaces
- Excellent EP and anti-wear properties – protects equipment against extreme loading and helps minimise bearing component wear

Typical Characteristics

Name	Method	Units	EPL 0	EPL 1	EPL 2	EPL 3
Appearance	Visual	-	Amber to Brown	Amber to Brown	Amber to Brown	Amber to Brown
Thickener type	-	-	Lithium	Lithium	Lithium	Lithium
Base oil	-	-	Mineral oil	Mineral oil	Mineral oil	Mineral oil
Consistency	ASTM D217	NLGI Grade	0	1	2	3
Worked Penetration (60 strokes @ 25°C / 77°F)	ASTM D217	0.1 mm	355-385	310-340	265-295	220-250
Dropping point	IP 396	°C/°F	160/320	190/374	190/374	190/374
Base Oil Viscosity @ 40°C / 104°F	ASTM D445	mm ² /s	150-200	150-200	150-200	150-200
Anti Rust Performance (Emcor)	IP 220	Rating	0/0 max	0/0 max	0/0 max	0/0 max
Copper corrosion, 24 hours @ 100°C	ASTM D4048	Rating	1b max	1b max	1b max	1b max
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D2266	mm	1 max	1 max	1 max	1 max
Four Ball Weld Load test - Weld Point	ASTM D2596	kgf	250 min	250 min	250 min	250 min
Water Wash-out, 1 hour @ 79°C / 175°F	ASTM D1264	% wt	-	10 max	10 max	10 max
Oil separation, 168 hours@40°C (%)	IP121	% wt	10 max	10 max	6 max	6 max

Subject to usual manufacturing tolerances.

Additional Information

In order to minimise potential incompatibilities when converting to a new grease, all previous lubricant should be removed as much as possible prior to operation. During initial operation, relubrication intervals should be monitored closely to ensure all previous lubricant is purged.

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